

II. Project in Progress



Assembling new partition walls in the basement



Work on new chilled water lines near the Heliport



Finishing work on new South Terrace bridge steps



Under a new cafeteria floor between rings in Wedge 1



June 1999, a panoramic view of the site work for the new Remote Delivery Facility.

Note: For security purposes the exact site location of some individual projects are not included in this report. Any additional information can be furnished upon request.



II. PROJECTS IN PROGRESS

SWING SPACE

BASEMENT/MEZZANINE

Basement/Mezzanine Segment 1

- DiLorenzo TRICARE Health Clinic
- Segment 2A2

Basement/Mezzanine Segment 2-3

WEDGES

Wedge 1

- Floors 1-5
- South Terrace

Wedges 2-5

- Floors 1-5

POWER/SITE

Replacement of Underground Water Lines

Access Road Widening

Chilled Water Line Feeders

ANCILLARY PROJECTS

Remote Delivery Facility (RDF)

Metro Entrance Facility (MEF)

Heliport Firestation and Control Tower



III. Projects in Progress**Swing Space**

The Pentagon Renovation Team leased three office buildings within a three-mile radius of the Pentagon to relocate the more than 5,000 personnel who vacated Wedge 1. In all, 45 floors of “swing space” were renovated to accommodate the unique requirements of Pentagon tenants.





SWING SPACE



The Pentagon is “the office” for over 25,000 people every day. Hundreds of discrete offices have legitimate individual needs concerning such things as space allocation, specialized communications, security and safety. There are medical facilities, private concessionaires, and food service facilities. All of these people and offices will experience at least one major relocation before the renovation is complete. Thousands must be moved out of the building for extended periods, requiring leased space outside the Pentagon, warehouses, and move planning.

In addition to internal space within the Pentagon, several leased buildings in the vicinity of the Pentagon now house the 6,300 employees relocated from the basement and Wedge One.



Swing space buildings provide amenities and features found in typical modern office towers.



In most cases, personnel relocated to swing space, vacated the Pentagon on a Friday and were up and running in their new office the following Monday.

III. Projects in Progress

Swing Space



Swing space in nearby office buildings provides a modern office environment and many local area amenities.

All swing space has been built out to provide full connectivity to the Pentagon through classified and unclassified backbones, local area networks (LANs), telephone lines, and electronic mail. The three large buildings have been built-out to meet the former Pentagon tenants' mission requirements, and feature modern office space with new systems furniture, state-of-the-art voice and data communications systems, and sophisticated security systems.

It is anticipated that the three large buildings will be occupied by displaced Pentagon employees throughout the entire renovation, while the smaller amounts of space can be vacated after the completion of Wedge Three.

**MOVE-OUT**

Up to now the focus of swing space activities has been moving Pentagon tenants into external and internal space. The first swing space move-outs into newly renovated areas of the Pentagon will be experienced in FY00 when approximately 75 people will move into the Remote Delivery Facility.

**TEMP MEP/COMM**

The Temp MEP/Comm process does not apply to swing space.

**DEMO & ABATE**

A minimum amount of asbestos abatement was required to convert internal (A-Ring) Pentagon space to habitable swing space areas.

More extensive demolition and abatement work will be completed in FY00 when the old DiLorenzo Clinic is vacated and then renovated to provide temporary housing for assorted tenants moving out of Wedge 2.



III. Projects in Progress

Swing Space



CORE & SHELL

The majority of swing space was built-out and occupied by FY99.



TENANT FIT-OUT

With the anticipated vacating of Wedge 2, additional fit-out work is scheduled for FY00. Areas to be renovated as swing space will include the DiLorenzo Clinic (approx. 30,000 sf) and the public cafeteria at Corridors 1 & 2.



Following the move-in, swing space customers were visited by the Pentagon Renovation program manager (left).



Above: A swing space area ready for new stud walls that will define the tenant space. Inset: Systems furniture in place.

III. Projects in Progress

Swing Space



Swing space buildings feature modern conferences room and audio/visual capabilities.



INFORMATION MANAGEMENT & TELECOMMUNICATIONS (IM&T)

IM&T support was provided during the tenant fit-out phase of swing space construction. The Pentagon Renovation Program incurs an on-going cost at all external swing space buildings to maintain and upgrade the IM&T infrastructure. This maintenance and monitoring service is provided by the Network Infrastructure Services Agency-Pentagon (NISA-P), formerly known as Single Agency Manager (SAM).



FURNITURE, FURNISHINGS & EQUIPMENT (FF&E)

Prior to FY 1999, the Pentagon Renovation Program had contracted with a furniture manufacturer to furnish and install systems furniture in the three major swing space buildings, which are now fully furnished and occupied.

This process continues as swing space is added and the primary source for furnishings becomes "attic stock," and will be supplemented with new furniture only as necessary.



In 1997, former Secretary of the Navy John Dalton (right) visited with Navy swing space tenants after they first moved to their new offices.



SECURITY

Measures were taken throughout the construction and move-in process to ensure that the temporary swing space areas obtained the same high level of security as required in the permanent tenant offices.

Swing Space



Occupancy of the renovated DiLorenzo Clinic and Cafeteria area at Corridors 1 & 2 will account for the majority of the 300-400 swing space move-ins during FY 2000.



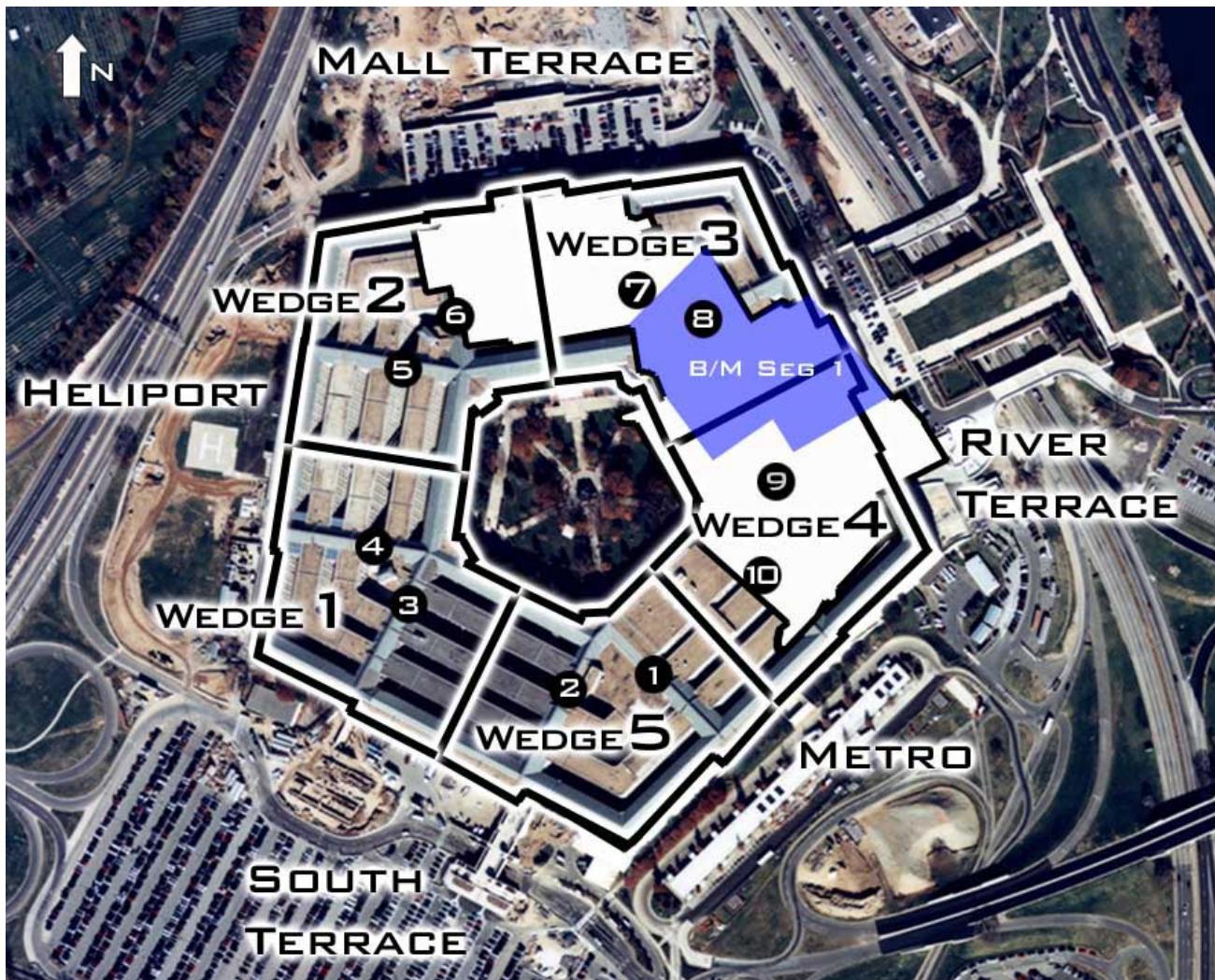
A man in a light blue police uniform with dark epaulettes and a pilot's wing badge is sitting at a desk. He is looking towards the camera with a slight smile. Behind him is a large window with horizontal blinds, partially open, showing a view of a city with houses and trees under a cloudy sky. To his right is a cubicle wall with a whiteboard and some papers. On the desk in front of him is a small round table with a newspaper or magazine on it.

An Air Force Lt. Col. enjoys the view from his office on the 10th floor of a newly renovated swing space building .

III. Projects in Progress

Basement/Mezzanine - Clinic

The main reception area of the new DiLorenzo TRICARE Health Clinic near the Corridor 8 entrance. The clinic was turned over to the Pentagon medical community in January 2000.



Basement/Mezzanine Segment 1 Locator



III. Projects in Progress

Basement/Mezzanine - Clinic

BASEMENT/MEZZANINE SEGMENT 1



THE DILORENZO TRICARE HEALTH CLINIC

The DiLorenzo TRICARE Health Clinic was constructed as part of the Segment 1 Mezzanine and is now nearly complete. The space formerly housed a motor pool and has been transformed into a state-of-the-art health care facility. This consolidated facility will eliminate redundancy of services, including pharmacies, radiology suites, file centers, and other ancillary support functions while saving valuable personnel time. The construction contract for the clinic was awarded on August 21, 1997.

SEGMENT 1 HIGHLIGHTS

- 800,000 square feet renovated
- 1,200 personnel moved into renovated space
- 1,800 piles driven to support new slab
- 45,000 cubic yards of soil removed
- Basement slab lowered
- New Mezzanine level created an additional 320,000 square feet of space



MOVE-OUT

The occupants of the existing DiLorenzo Clinic will move directly to the new DiLorenzo TRICARE Clinic. Due to the internal nature of the move, the use of swing space is not a factor. The move is currently in progress. The key challenge for the clinic personnel will be to maintain daily operations while transitioning into the new facility. The vacated space will be evaluated for hazardous material abatement and then renovated for use as swing space.

The Pentagon motor pool below the River Terrace as it appeared in 1997 before its transformation into a state-of-the-art health facility began.



III. Projects in Progress

Basement/Mezzanine - Clinic



Ambulance access to the clinic is made through the entrance to the former motor pool below the River Terrace.

**TEMP MEP/COMM**

For the DiLorenzo TRICARE Clinic, the temporary mechanical, electrical and plumbing work was accomplished by a combination of the demolition and abatement contractor and the prime clinic construction contractor. The demolition and abatement contractor rerouted and/or removed the majority of the old motorpool electrical services and provided the barrier walls to the adjacent occupied areas of the Pentagon. The prime clinic construction contractor provided the mechanical demolition and relocation as part of the main construction contract. Since the area was previously a motorpool, there was no communications infrastructure to be demolished and relocated. As part of the move-out of the existing drivers lounge, IM&T coordinated the relocation of the drivers phone lines to the temporary drivers lounge.

Clinic personnel receive new software training in newly completed clinic space.





III. Projects in Progress

Basement/Mezzanine - Clinic



DEMO & ABATE

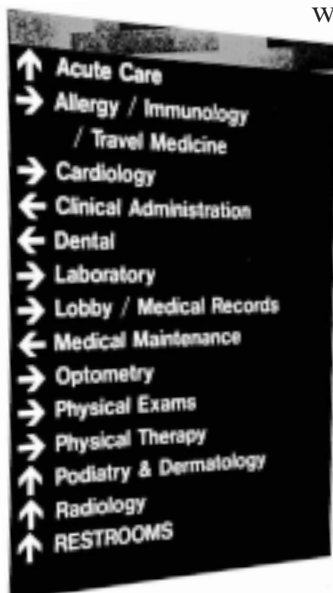
The site for the DiLorenzo TRICARE Clinic was formerly the Pentagon motorpool and was rife with lead-based paints, petroleum-soaked concrete, mercury and PCB contaminated light ballasts, and asbestos pipe insulation and plasters. The abatement of the clinic was performed by a local abatement firm during FY 1997-98. Work included full abatement of the old motorpool, leaving a clean site for follow-on construction.



CORE & SHELL

Core and shell construction for the DiLorenzo TriCare Clinic was accomplished by a combination of the Basement Segment 1 construction contract and as part of the main clinic construction contract. The Basement Segment 1 contractor provided the floor slab and penetrations for mechanical and electrical systems. The prime clinic contractor completed the mechanical systems within the new clinic space, including the construction of clinic mechanical rooms located in the 2A2 area of the Pentagon basement. Other core and shell items such as hall-

ways, electrical and telecommunication closets, and restroom facilities were completed concurrently with the tenant fit-out portion of the construction contract.



A sign in the new clinic points out the direction to some of the 21 areas of medicine available in the facility.



The reception area in the clinic's new dental facility. Pentagon personnel will be accommodated in any of 30 dental rooms. Previously, only 12 dental chairs existed in the Pentagon.

III. Projects in Progress

Basement/Mezzanine - Clinic



Optometry exam room in the new clinic.



TENANT FIT-OUT

The tenant fit-out phase was accomplished as a combination of the prime clinic construction contract, an independent carpet contract and coordinated Health Affairs contracts. The clinic construction contractor completed the general infrastructure construction. A flooring contractor provided carpeting, installed the furniture and much of the actual medical equipment. The work required close coordination between all parties to ensure a successful project. The program schedule did not allow the luxury of each contractor completing his efforts in ideal sequence. Despite complicated planning and multiple contractors sharing a space, the project was brought to successful completion. The completed clinic consists of specialized areas such as pharmacy, radiology, optometry, audiology, physical therapy, minor surgery, trauma center, dental, podiatry, and others. A common theme throughout the clinic is the ability to make full use of tele-medicine. The clinic's state-of-the-art communication system allows both internal communications as well as worldwide connectivity.



Exam room in the new clinic.



INFORMATION MANAGEMENT & TELECOMMUNICATIONS (IM&T)

The IM&T has been completed. The required facilities were incorporated in both design and construction.



FURNITURE, FIXTURES, & EQUIPMENT (FF&E)

Furniture installation was completed in February 2000.



III. Projects in Progress

Basement/Mezzanine - Clinic



SECURITY

The Security is complete. Security has been incorporated in both design and construction. The majority of the work relates to access control.



COMMISSIONING

The commissioning occurred concurrently with the design and construction of the clinic and will be carried into the warranty period. Because the area is highly specialized, commissioning includes medical gas, medical vacuum specialized exhaust, miscellaneous medical systems and extensive electrical/mechanical/plumbing requirements. Successful commissioning of the clinic is being achieved through extensive integrated cooperation with general contractors, specialized contractors, medical personnel, and Pentagon Renovation team members.



The clinic includes facilities to clean medical instruments.



MOVE-IN

Move-in of the new facility will be an internal move. The use of swing space was not a factor. The move-in process is in progress. The key challenge for the clinic personnel is to maintain daily operations while transiting into the new facility. The "first patient" date is scheduled for March 2000.

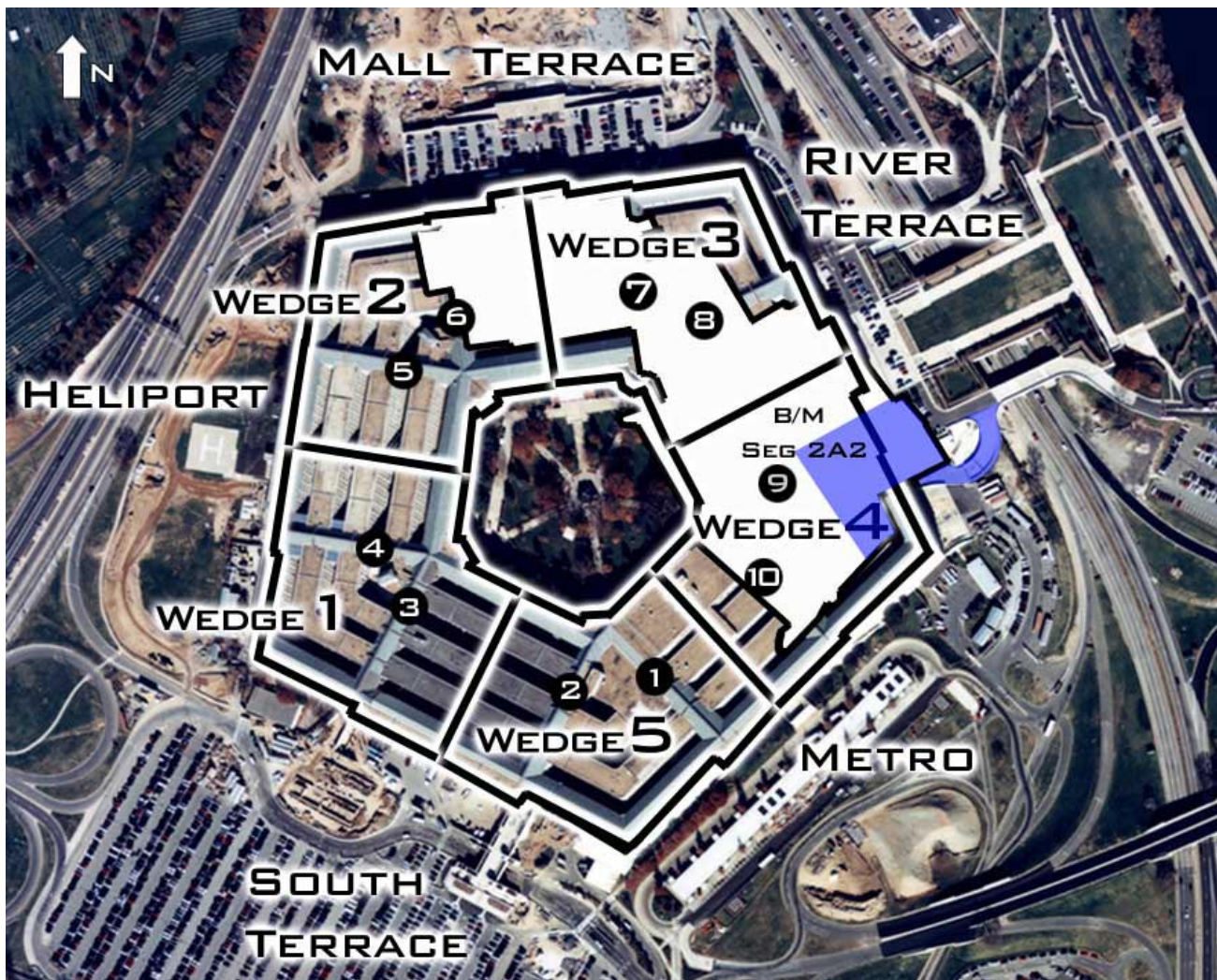


A ribbon-cutting ceremony was held in the new TRICARE Clinic in February 2000.

III. Projects in Progress

Basement/Mezzanine - Segment 2A2

Aerial view of the “mug handle” roadway, which serves as the roof over a portion of renovated space in the Pentagon’s basement.



Basement/Mezzanine Segment 2A2 Locator



III. Projects in Progress Basement/Mezzanine - Segment 2A2



BASEMENT SEGMENT 2A2

Due to the crossing of shared utility lines, Segment 2A2 was expedited to complete work along with the Segment 1 projects.



MOVE-OUT

The move outs were from a mix of internal and external spaces. They came from various spaces in the Pentagon as well as two external buildings. The move process occurred over a span of 4 months in mid 1999. This was done because the construction was broken into two phases and involved nine different tenants.



New electrical lines and ductwork is being installed in a portion of the Pentagon basement known as "2A2." Renovation of 2A2 is now complete and the space is fully occupied.



TEMP MEP/COMM

The Temp MEP for 2A2 was accomplished by a local small and disadvantaged business demolition and abatement contractor. The contractor installed the needed barrier walls and performed the necessary isolation and relocation of utilities to prepare the area for demolition and subsequent construction. Temp Comm. was accomplished by a local small and disadvantaged business. This work was performed during fiscal years 97/98.

III. Projects in Progress

Basement/Mezzanine - Segment 2A2



The ceiling grid is installed in the Segment 2A2 basement area. The curved wall at right is the foundation for the roadway above.



Worker sands the sheetrock to prepare the surface for painting.

**DEMO & ABATE**

The demolition and abatement for Segment 2A2 was also accomplished as part of the same contract noted previously. The abatement contractor removed all asbestos insulation, asbestos-bearing plaster, PCB and mercury-contaminated light ballasts and asbestos-contaminated floor tiles. In conjunction with the general demolition, lead paints and any other contaminants were removed, leaving the area clean and ready for the core and shell phase of the project.

**CORE & SHELL**

The core and shell portion of the Segment 2A2 project was accomplished by a local contractor during FY 1998 and 1999. It included the demolition of the floor slab, the excavation of the soil to allow for a lower floor slab to match the new adjacent Basement Segment 1 floor elevation. The work continued with the driving of new foundation piles to support a new floor and the construction of a new mezzanine floor. The contractor completed the installation of the new mechanical systems, electrical closets, telecommunications closets, restroom facilities, and main hallways.



A crew installs the raised floor that will support a new technical facility in the basement.



III. Projects in Progress Basement/Mezzanine - Segment 2A2



TENANT FIT-OUT

The tenant fit-out of 2A2 space was accomplished by a local small and disadvantaged construction firm during FY 1998 and FY 1999. While the contractor finished the hallways and basic infrastructure, another contractor worked to complete each individual tenant area within Segment 2A2 space. Work included the installation of room-specific HVAC, telecommunications and electrical conduits and cables, raised flooring, carpeting, dropped ceilings, and general room finishes. The contractor also worked with the furniture suppliers and installers (a separate Pentagon Renovation contract) to assist in connecting the furniture to the building power system. After work was completed in the common areas, new terrazzo flooring was installed.

A crew readies concrete for the curing process. The site is directly above renovated space and will serve as a parking area adjacent to the new clinic entrance.



III. Projects in Progress

Basement/Mezzanine - Segment 2A2



New "spine-wall" systems furniture features a communications wire panel for easy access to an office's telecommunications lines. Wires originating from one main panel like the one shown above can feed up to 12 work stations.



INFORMATION MANAGEMENT & TELECOMMUNICATIONS (IM&T)

- The Optical Remote Switching Module was installed as a part of the first phase of the General Purpose Switch upgrade and cutover of the Switch to the Army Operation Center.
- The installation of equipment and upgrades for the Business Automated Data Processing Center has been completed.
- Relocation of the Command and Control Automated Data Processing Center to its newly renovated facility has been completed.
- Installation of Basement/Mezzanine Segment 1 Backbone has been completed.
- Final operational capability and cut-over of the Network Systems Management Center has been completed.
- Final operational capability and initial cut-over of the Pentagon Consolidated Technical Control Facility has been completed.



Telephone and electrical connections at the desktop level facilitate access and minimize the number of wires running along the floor.



III. Projects in Progress

Basement/Mezzanine - Segment 2A2



New fiber optic cabling is installed below the raised floor grid.



A view below the raised floor grid.



Inside a new data tape storage facility.

III. Projects in Progress

Basement/Mezzanine - Segment 2A2



New modular furniture in the basement maximizes the use of available space.



FURNITURE, FIXTURES, & EQUIPMENT (FF&E)

The second phase of the project used furniture conforming to the new Pentagon Renovation standards. It incorporates the use of a spine wall (this wall is the pathway for the power and communications to the stations). The spine wall also allows for easier configuration of stations. This is achieved by not only having the ability to install panels at any point along the spine wall (in traditional systems furniture you have to have a break point to install a new panel). In addition, since the wiring is down the spine, no wires have to be moved to allow for the change. This furniture was purchased under a new contract. It included an incentive package for the furniture vendor based on its performance. The vendor performed above our expectations and earned a substantial award fee.



SECURITY

The Security is complete and has been incorporated in both design and construction. The majority of the work relates to access control.

An information management and telecommunications worker removes a floor panel to run new fiber optic lines. The raised floor configuration facilitates changes to office space even after furniture is in place.





III. Projects in Progress Basement/Mezzanine - Segment 2A2



COMMISSIONING

The commissioning of the Segment 2A2 space was accomplished through extensive multi-contractor coordination. Three separate contractors combined to provide the main HVAC and plumbing systems, the point-of-use and tenant space sub-systems, and the controls for the entire package. All three contractors worked together in the commissioning effort as all of their individual portions had to function properly and work with the others' equipment to provide a fully functional system that would supply the tenants' needs. Although there were some initial problems and compatibility issues to be worked out, the commissioning process went smoothly and has resulted in a system that has been used as an example of how a system should be designed and installed for the rest of the renovation.



New systems furniture provides the flexibility to easily reconfigure an office space. Above, the semi-circular table at center can be rolled away from the adjacent desktops and can then be combined with another unit to make a round conference table.



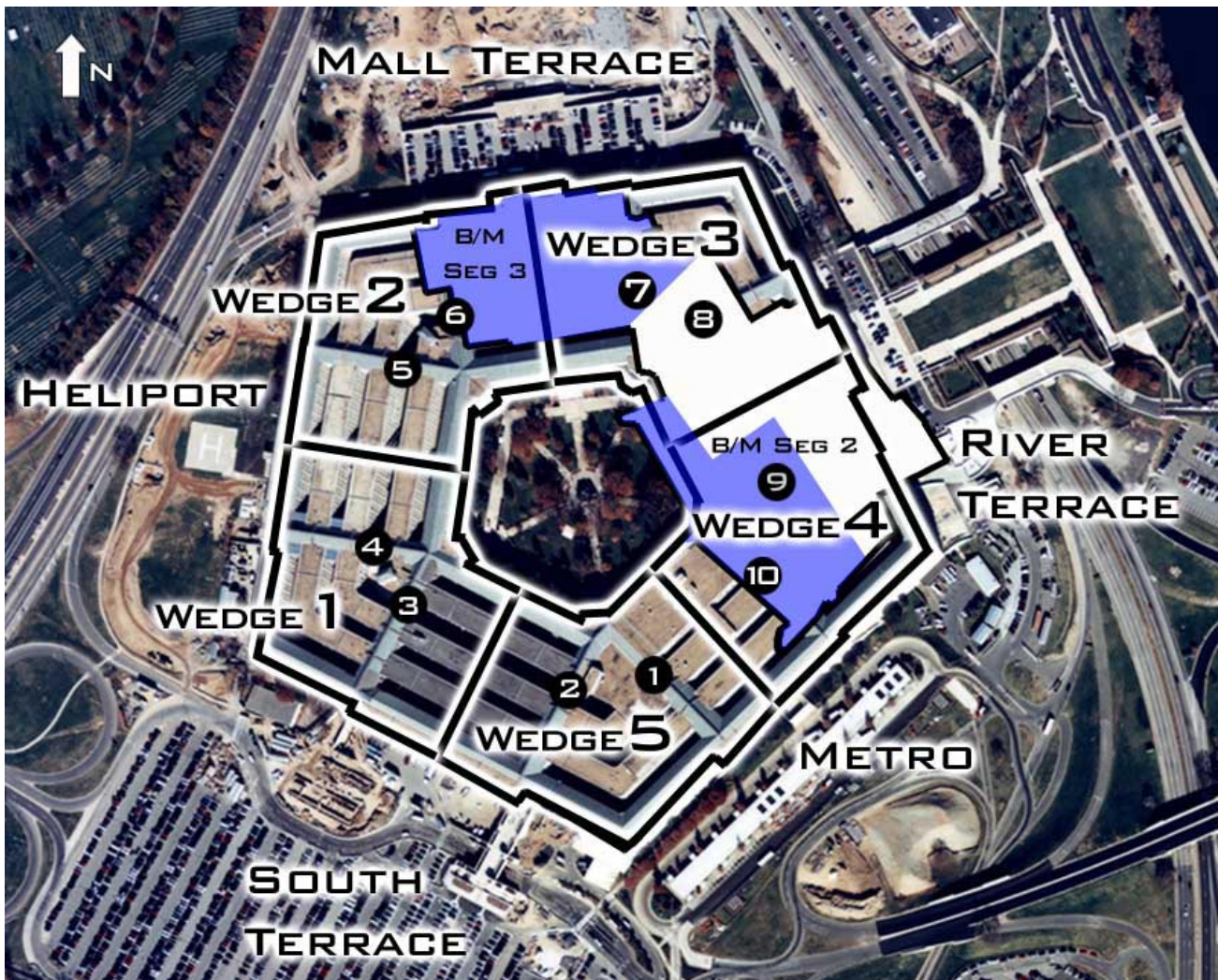
MOVE-IN

The move into Segment 2A2 came from various spaces in the Pentagon and two external buildings. The move process occurred over a span of 4 months in mid 1999. Due to the construction being broken into two phases and involving nine different tenants.

III. Projects in Progress

Basement/Mezzanine - Segment 2-3

The Pentagon's basement lies below the River Terrace and below portions of both the Mall (top right) and Metro (bottom left) sides.



Basement/Mezzanine Segment 2-3 Locator



III. Projects in Progress

Basement/Mezzanine - Segment 2-3

BASEMENT/MEZZANINE SEGMENT 2-3



Demolition has begun in a vacated area in the basement. The exposed ceiling grid reveals a maze of wires, which was poorly documented on building drawings.



To minimize dust, a worker sprays water on debris as it falls during the demolition process.

Segments 2A1 and 3 comprise approximately 500,000 square feet of below ground space. Current plans are to complete demolition and abatement and improve life safety elements in these areas. At this time, the Renovation Program is not planning to continue work in the basement after the completion of the demolition and abatement process due to budget restrictions.



MOVE-OUT

Segment 3 is divided into two areas, 3A and 3B. Move-out of 3A, previously occupied by 411 tenants, was completed in the spring of 1999. Segment 3B will not be vacated until 2007. Segment 2A1 was originally occupied by 924 tenants. The final tenants were moved from the area in January 2000.



TEMP MEP/COMM

Segment 3A Temp MEP/Comm was completed in the summer of 1999. Segment 2A1 Temp MEP/Comm began on January 15, 2000.



DEMO & ABATE

Segment 3A demolition and abatement began in May 1999 and was completed in January 2000. Segment 2A1 demolition and abatement began in January 2000 and will be completed in January 2001.



CORE & SHELL

None planned at this time.

III. Projects in Progress

Basement/Mezzanine - Segment 2-3



A view above a basement ceiling grid reveals a network of utility conduits, ductwork and wires.

**TENANT FIT-OUT**

None planned at this time.

**INFORMATION MANAGEMENT & TELECOMMUNICATIONS (IM&T)**

In coordination with the Pentagon Renovation Program office, IM&T will continue to operate with the newly defined Pentagon Renovation Back-to-Basics program. The redefinition of the level of renovation scheduled for Basements Segments 2 and 3 has resulted in the relocation of command centers from the basement to above-ground locations. The primary IM&T challenge in FY 00 will be the development of final designs resulting from the decision necessary to relocate remaining Command Centers to above-ground locations.

View inside an asbestos containment area. Operatives are removing asbestos containing mastic from the floor.





III. Projects in Progress

Basement/Mezzanine - Segment 2-3



FURNITURE, FIXTURES, & EQUIPMENT (FF&E)

None planned at this time.



SECURITY

None planned at this time.



COMMISSIONING

None planned at this time.



MOVE-IN

None planned at this time.



View inside Phase 1 showing mechanical demolition and debris removal.



A basement area below the Mall Terrace known as "3A" has been cleared of asbestos and all office partitions.